

SHOT LIST

U.S. CHEMICAL SAFETY BOARD PHOTOGRAPHS

SILVER EAGLE REFINERY FOLLOWING NOVEMBER 4, 2009 EXPLOSION

Assembled by SG and Dan Tillema 11.7.09

THIS SERIES DEPICTS THE FAILED PIPE WHERE THE HYDROGEN WAS RELEASED AND IGNITED.

1. DSC00164 Bottom of MDDW Reaction # 1 shows 10" pipe at end of elbow where it failed. This opening pointed east, directly through a "tunnel" of pipes and equipment toward a subdivision house. This house was reportedly condemned.
2. DSC00181 Exterior shot showing other end of failed pipe going to the vessel flange. Note piping on right had wrapped around a structural support beam as a result of the explosion. The pipe end in this photo faces south.
3. DSC0178 Photo depicting failed pipe connected to flange. As a result of the force of hydrogen pressure released at the time of rupture, piping behind flange was first pushed out to the east, and then momentum bent pipe to the south around a steel structural beam.
4. DSC_0184 Photo taken from atop a refinery column. Shows refinery property in foreground, commuter train going by, and subdivision on other side of dividing wall.
5. (sg's shot) DSC08360 Wide shot Silver Eagle refinery. Accident occurred between the two vessels on the left.

THIS SERIES IS FROM THE POINT OF VIEW OF PIPE OPENING FACING HOME IN SUBDIVISION. IT DEPICTS THE PATH OF THE BLAST WAVE.

1. DSC_0237 Wide shot inside diesel hydro-treater unit MDDW HDS facing subdivision to the east.
2. DSC_0238 Shot closer to subdivision
3. DSC_0239 Shot closer
4. DSC_0240 Closer
5. DSC_0241 Closer
6. DSC_0242 Closer, shows wall at subdivision boundary; shows side and roof of house that was most damaged, reportedly condemned.